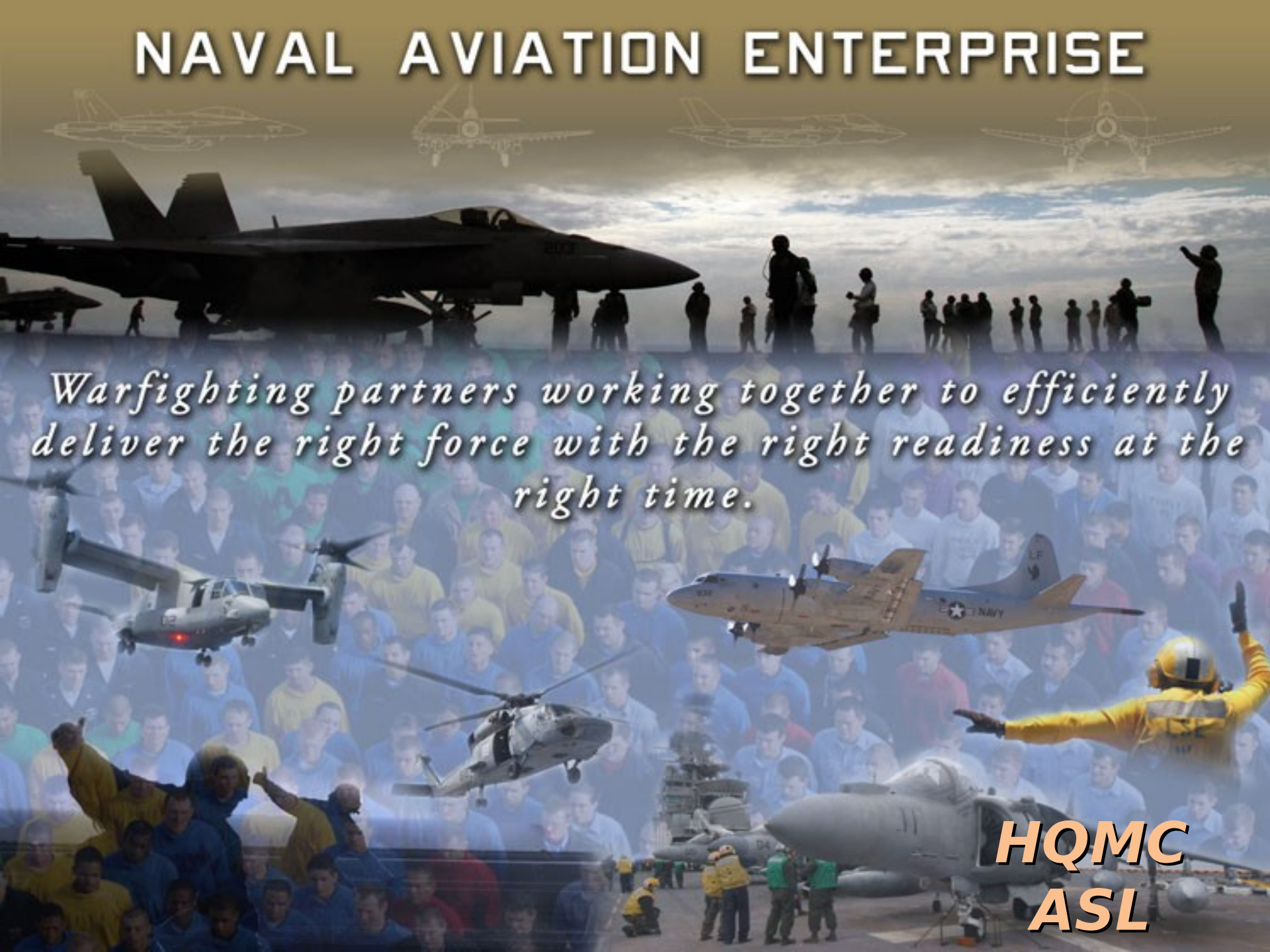
NAVAL AVIATION ENTERPRISE



Warfighting partners working together to efficiently deliver the right force with the right readiness at the right time.

HQMC ASL



Current Readiness (CR) Overview


Operations Officer Course



Situation

- **Experiencing Most Conservative Fiscal Environment**
- **Naval Aviation Costly & Marine Aviation is 40% of Naval Aviation**
- **Maintaining Future Combat Readiness Requires Efficient and Effective Resource Utilization – Readiness Cannot be Used as a Pretense to Justify Wasteful Behaviors (Result is Loss of Resources and REDUCED Readiness)**
- **Current Readiness (CR) Process Within the NAE Provides Framework for Addressing Readiness Issues Within Each Type/Model/Series (TMS)**
  - Obtain Help from Enterprise
  - Share Successes / Best Practices Across Enterprise

USMC Cannot Be Wasteful Under Pretext of Preserving Operational Effectiveness

Naval Aviation Enterprise

MISSION & VISION STATEMENT

Advance and Sustain Naval Aviation Warfighting Capabilities at an Affordable Cost; Today and in the Future……

NAE…Bottom Line Upfront

Naval Aviation

Focused on delivering combat en

Naval Aviation Enter

Supports the delivery of combat effects
…Better, Smarter, Faster

You

The driving force behind the Naval Aviation Enterprise

Our strategic environment and fiscal realities require us to continuously pursue process improvement… everywhere

CR Improvement Program

MCO 3710.7

rine Corps Aviation Current Readiness Improvement Progr

https://www.portal.navy.mil/comnavairfor/Naval_Aviation_Enterprise/current_readiness/USMC%20Orders/Forms/AllItems.aspx

- Efficiently Use Available Resources
- Improve Current Readiness and Integrate w/NAE
- Mission
  - Optimize Material Resource Allocations and Expenditures
  - Minimize Logistics Downtime and Delays
  - Achieve Required Readiness for Warfighting Missions
- Intent
  - Provide Operational Commanders More Accurate and Actionable Information
    - Identify and Assess Readiness Drivers
    - Isolate Root Causes
    - Shape Future Resource Decisions
  - Provide More Precise Measures of Readiness, Entitlement, and Deficiencies
  - Provide Better Responsiveness and Support Aligned to Readiness Goal
  - Facilitate Aggressive and Proactive Decision Making

Performance Objectives

DC/A Objectives

- Increased Readiness
  - *Increased In-Reporting (IR) rates*
  - *Decreased out-of-reporting (OR) rates*
  - *Reduced Depot TAT*
- Reduced Direct Maintenance Man-hours per Flight Hour (DMMH/FHP)
- Reduced Flight Hour Costs
- Extend Airframe Service Life for legacy aircraft
- Achieve programmed service life for new platforms
- Increase health of organizational and intermediate level maintenance departments

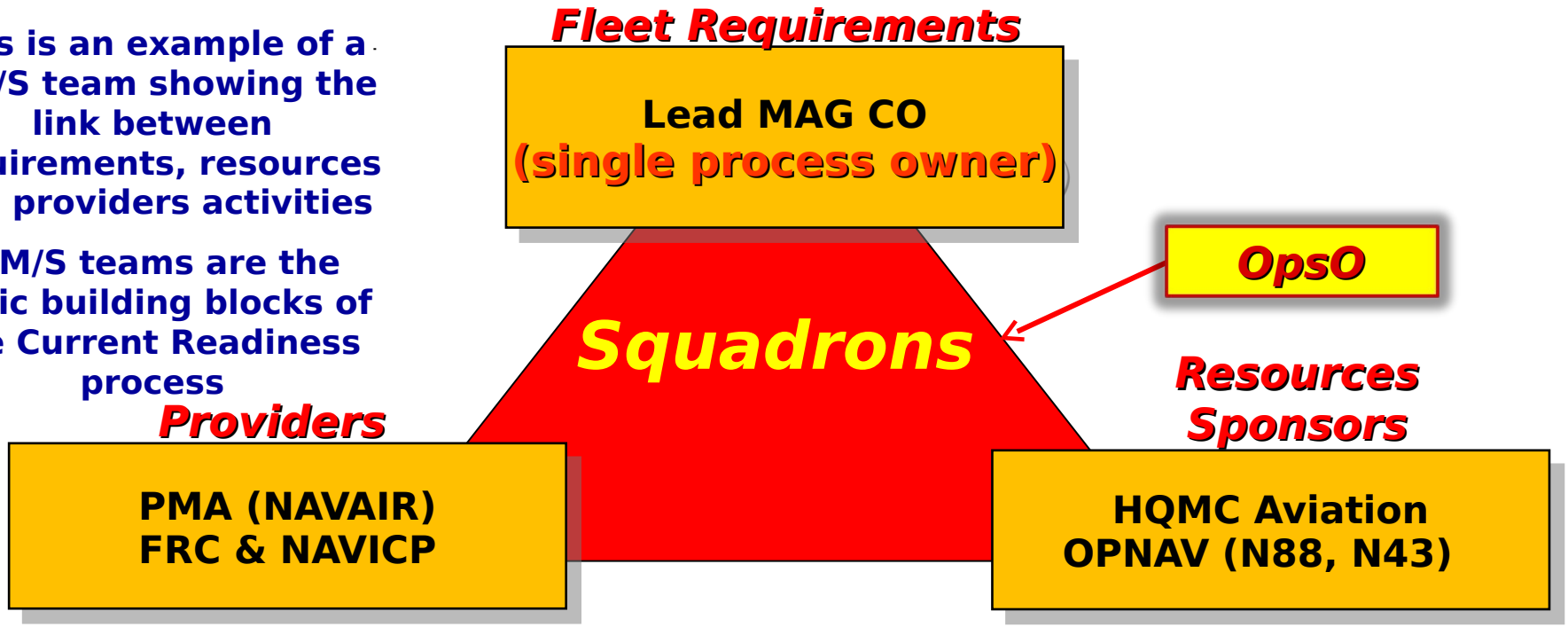
Fight & Train Now...
and Posture The Marine Corps For The Future

- **Increase Aircraft Readiness**
  - ***Increase Aircraft Availability***
  - ***Increase In-Reporting (IR) rates***
  - ***Decrease out-of-reporting (OR) rates***
  - ***Reduce Depot TAT***
- **Reduce Workload on Marines**
- **Understand & Manage Costs**
- **Extend Service Life for Legacy Aircraft**
- **Achieve Programmed Service Life for New Platforms**
- **Increase Health of Organizational and Intermediate Level Maintenance Departments**
- **Increase Sortie Generation**
- **Increase Combat Power**
- **Increase Reliability of Aircraft & Components**
- **Increase Reliability of Logistics Process**

Type/Model/Series (TMS) Team

This is an example of a T/M/S team showing the link between requirements, resources and providers activities

T/M/S teams are the basic building blocks of the Current Readiness process



T/M/S Team Membership

- MAG CO (Lead) and Staff (Group and MALS)
- MAG CO (Follow) and Staff (Group and MALS)
- ALD AVLOG CFTs & MM *(New Initiative)*
- PMA and APML
- FRS CO
- NAVICP/IWST/DLA
- TYCOM Class Desk
- NAVAIR T/M/S Fleet Support Team (FST)
- Contractor Support (BAH, OEMs, etc.)
- FRC Production Officers

Levels of Enterprise Engagement

- **Flag / General:**
  - Lead Naval Aviation / NAE
  - Develop NAE strategy
  - Represent NAE equities in organizational meetings
  - Participate in NAE strategic communications efforts
  - Elevate barriers / issues

- **Major Command:**
  - Lead command(s)
  - Warfighting / Fleet focus
  - Materially participate in NAE activity drumbeat
  - Resource allocation / CPI
  - Process discipline (metrics)
  - Barrier identification / removal
  - Advocate for the NAE

- **O-5 Command:**
  - Lead command
  - Warfighters / warfighter support
  - Share key messages and themes at squadron-level
  - Responsible stewards of allocated resources
  - Barrier identification / removal

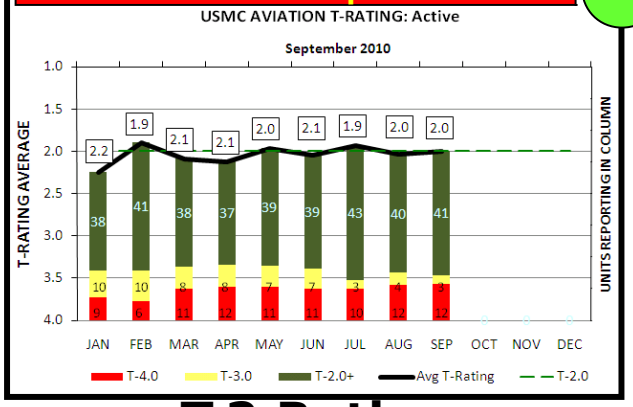
- **Dept Head and Junior Officer:**
  - Lead Marines and Sailors
  - Tactician / Manager
  - "Fly the Profile"

- **A Marine / Sailor**
  - Deckplate leadership
  - AIRSpeed practitioner (as function of rate/MOS and

Everyone engages the NAE…in varying degrees…but <u>everyone</u> benefits

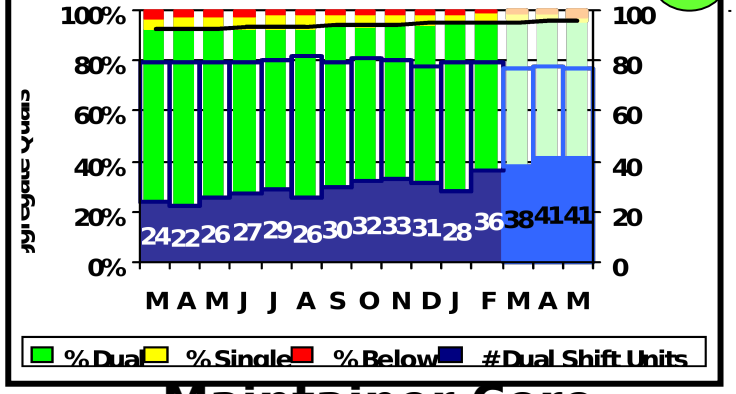
USMC Top Five

Average T-Rating of Green, Yellow and Red Squadrons



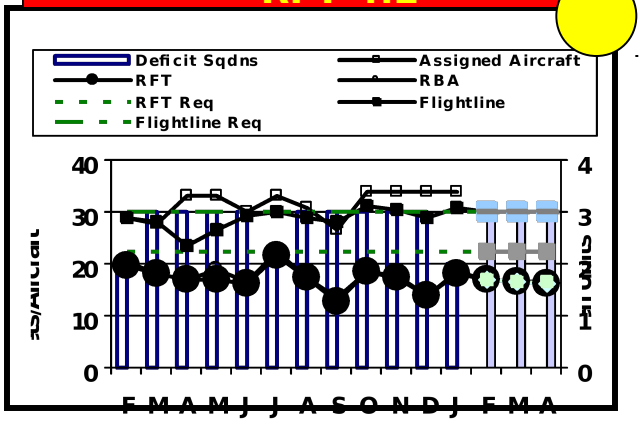
T-2 Rating

2 Dual Shift; 1 Single Shift



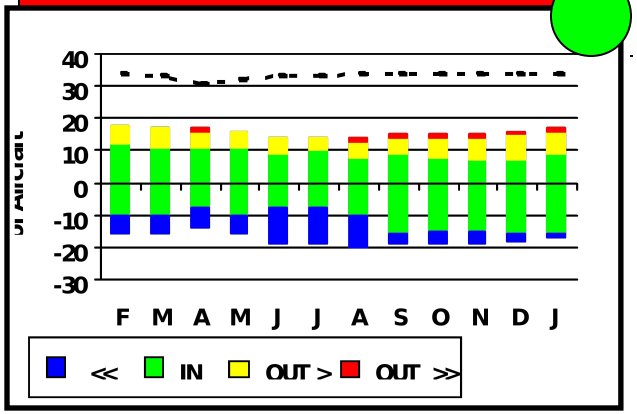
Maintainer Core Competency

GAPS: F/L 0, RBA 4.2, RFT 4.2



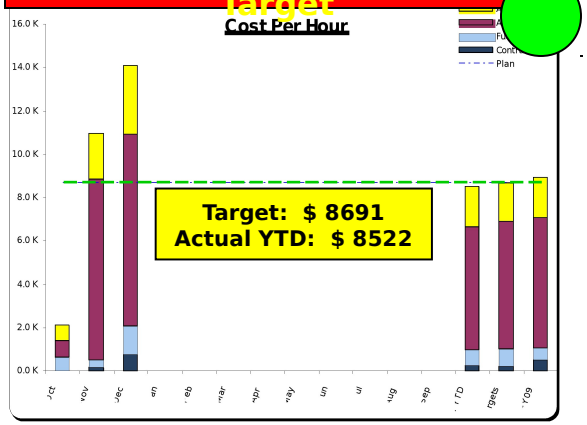
RFT Availability

No Issues



Aircraft Life Management

CPI: 1.01 SPI: 1.05
CPH YTD: $169 Below Target



Cost

Unclassified

CR Supporting Tools

- Continuous Process Improvement (aka, AIR*Speed*)
  - ✓ Theory of Constraints
  - ✓ Lean
  - ✓ Six Sigma
  - ✓ End to End (E2E)

Industry-proven best practices

- Used together …
  - ✓ Maintenance – Operations alignment planning
  - ✓ Attain Steady State expectations
  - ✓ Better prioritization to work on and execute "right" stuff
  - ✓ Inventory is at right spot … trade inventory for speed of throughput
  - ✓ Optimize consumption of material/labor … drive out variance

Products are delivered to the fleet faster at reduced cost

End-to-End (E2E) Basics

- **E2E Alignment is Center Piece to the Success of Marine Aviation's Transformation Strategy**
  - **Focuses on What Inhibits Readiness**
  - **Examines Specific Process That Impact <u>Effective Sortie Generation</u> at:**
    - **Aircrew Production**
    - **Flightline**
    - **Supporting Logistics Chain [Organizational – Intermediate – Depot (O-I-D)**

- **Focused on TMS Throughput (Readiness Production / Top Five)**

- **Provides Analysis Tools to:**
  - **Quantify the Impact of Shortfalls**
  - **Manage Uncertainty**
  - **Assist in Root Cause Analysis**

End-to-End (E2E) Basics

- **Aligns Processes and Optimizes Performance at :**
  - **Organizational**
    - **Ops/Maintenance Interface, Aircrew Production Core, O-I Interface, Weapon System Availability and Reliability**
  - **Intermediate**
    - **Capability-Based Production, Reliable Replenishment of Mission Sets, Cost Gaps Analysis**
  - **Depot Levels/OEM**
    - **Induction of Retrograde Closely Aligned to Fleet Demand, Reliable Replenishment of Mission Sets**

Expectation

An Operations – Maintenance - MALS Team with Cognitive Skills Needed to Perform Effective Time / Resource Management, In An Environment Characterized by Uncertainty and Resource Constraints – Sustained

E2E Starts With Squadron Ops and Maint; Ends With FRC's,OEM 's and Supporting Agencies

Understanding CR Throughput

Understand the Goal

Understand the System

Core Capable Unit

… with a global perspective

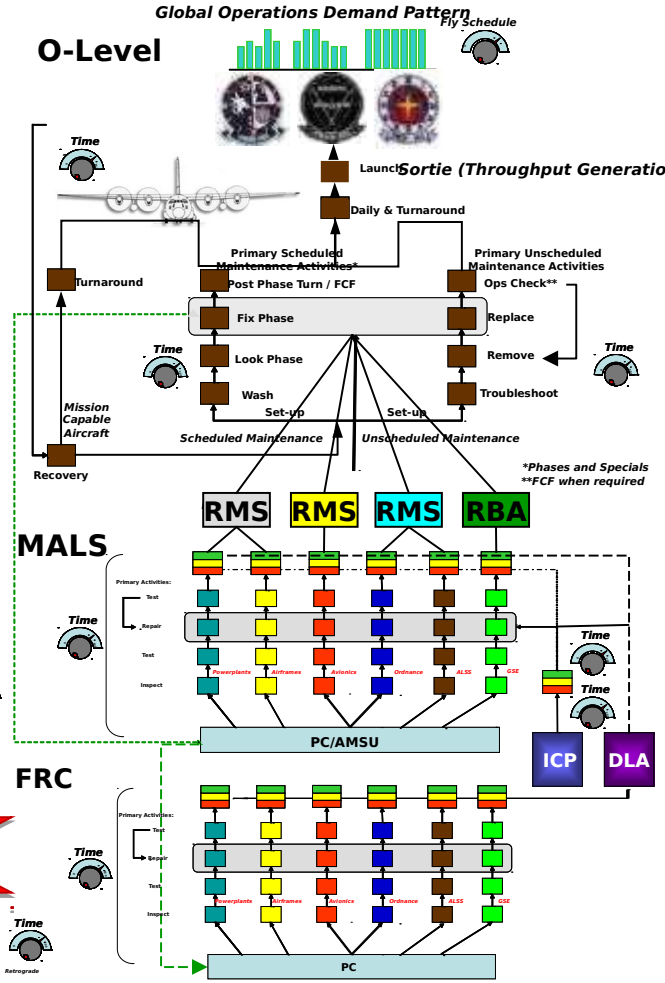
Squadron

12 Aircraft
42 Pilots [26 TPC/16 CP (T2P or T3P)]
36 Crew Chiefs
37 Loadmasters

6 Aircraft Detachment
20 Pilots [14 TPC/6CP (T2P or T3P)]
18 Crew Chiefs
19 Loadmasters

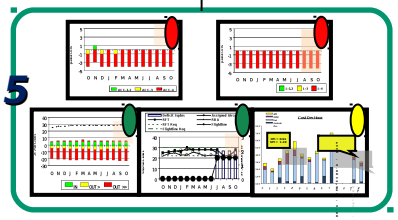
3 Aircraft Detachment
11 Pilots [6 TPC/5 CP (T2P or T3P)]
9 Crew Chiefs
9 Loadmasters

End-to-End AIR*Speed*
Designed & aligned to create reliable throughput to TMS team RFT requirements



GOAL
Core Capable Unit
Global Perspective

- Community Health
- Unit Readiness
- Goals vs. Actual (Va…

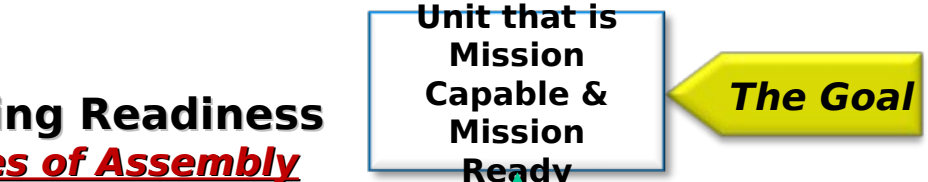


USMC TOP 5 METRICS

Understand how the System is Measured

Achieving Readiness

A Series of Assembly Operations



Operations
Maintenance
OMA/IMA
External resources

Constraining Resource Maximize Availability

Lines or Mission

Aircraft Availability [RFT Sets]

Trained Aircrew

RMS Sets

RBA

Exploitation Maximize Utilization

Flight Simulator

Flt E S&S GSE IMRL NDI/Weld

Supply

Fuel

Unsked Mx

Sked Mx

Flight Schedule

IP/LMI/CCI

Student Aircrew (Pilots, LMs, CCs)

REPs

CONS

Trained Maintenance Personnel [QCL's]

RANGES

Frag Pop-ups (30%)

Be-prepared To's

Monthly Prog

MALS

LM

PBA

Student Maintainers

CDI /QAR qualified Maintainers

Frag (70%)

Calendar

TEEP

G-3

Airfield Services Truck Drivers Pit Operators

Unclassified

Role of Flying Squadron

Overall:

- Collaborate
- Adhere to Rules of Engagement
- Identify and Address Obstacles to Design
- **Transparency – Open and Honest Dialogue Regarding Operations / Maintenance Contract**
- **Frequent Communication of Requirements / Shortfalls**

Specifically:

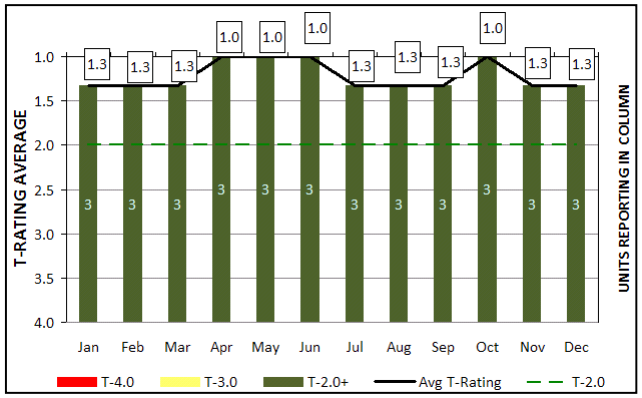
- Site Leadership
  - Commit Appropriate Resources
  - Address Behavior – Make Necessary Changes re: Policies, Measurements, and Roles & Responsibilities
- Contribute with SME's
- **Maintenance Department Understands Variability Impacts on Daily Flight Schedule**
- **Operations Department Understands Variability Impacts on Daily Flight Schedule**
- **Squadron Leadership (CO/XO, OpsO and AMO) Ask Right Questions and Take Appropriate Actions**
- **Maintenance and Operations Department Collaborate and Align Aircraft Availability with Capacity**
- Maintenance Analyst Update and Disseminate SCIR-based Maintenance Metrics Across Squadron
- Squadron Maintenance Dept and MALS Use SCIR-Based Metrics to Reduce Gaps

MALS and Flying Squadron MUST be Integrated and Focused on Goals

What Works and What Doesn't

- **What Works:**
  - **Think about the entire system**
  - **Open kimono within the squadron and between the MALS**
  - **Stick to the Rules of Engagement**
  - **Use the metrics to make decisions**
  - **Learn to ask the right questions**
- **What Doesn't Work:**
  - **Individual agendas**
  - **Silver-bullet remedies**
  - **When this is over, we'll return to business as usual**
  - **Criticism without recommendations**

What Should Be Observed & Timeframe



Expectations (60 days or less)

- **Increase Aircraft Availability and Utilization (Meeting Mission Requirements consistently)**
- **Increased range of IP/CP qualifications**
- **Fewer daily schedule modifications (changes in aircrew and aircraft)**

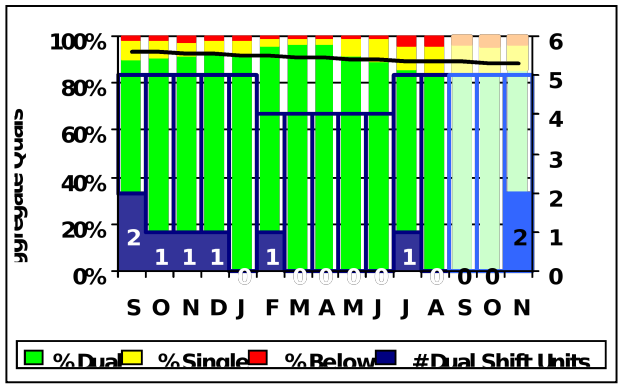
****Long Range: More predictive long range planning (FHP as identified through SBTP/CMMR and OP20)**

Deliverables

- **Schedule (contract) to maximize aircraft availability and utilization**
- **Understanding of Instructor Pilot (and CC / LM) capacity**
- **Buffering against variability in planning, scheduling and execution**

ACC / T-Rating

What Should Be Observed & Timeframe



Expectations (60 days or less)

- Training TEEP to meet MOS quals
- Identification of when degradation in capability will occur
- More predictive timelines for regeneration of Maintenance crews
- Focused improvement opportunities for scheduled and unscheduled maintenance
  - Joint Project Opportunities with MALS

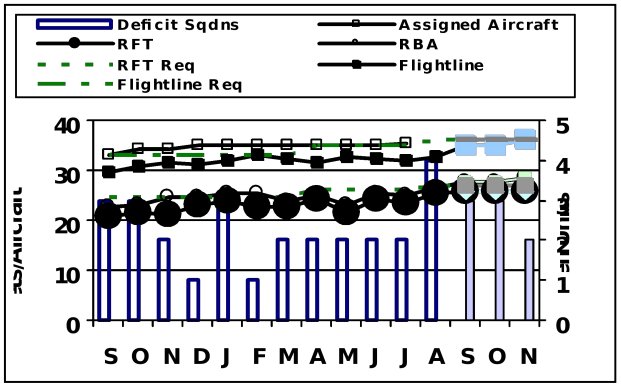
Deliverables

- Schedule (contract) to maximize aircraft availability and utilization
- Time to Train Timelines for Maintenance Quals
- Identification of manpower "buffers" to protect against variability
- Analysis of Scheduled and Unscheduled Maintenance Timelines

MCC

Unclassified

What Should Be Observed & Timeframe



Expectations (60 days or less)

- **Alignment of MALS production to support RBA, RBM and RMS set requirements**
- **Standardized Pack-Up procedures to support In-Garrison requirements, TEEP requirements, and Short Notice, Contingency Deployments**
- **Increased collaboration with like TMS MALS on repair capability**

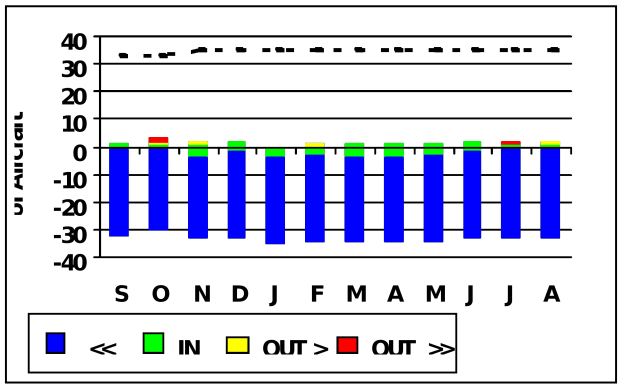
Deliverables

- **Ready Mission Set (RMS) Buffers sized at MALS**
- **Production of components geared toward RBA/RFT requirements**
- **Analysis of material consumption patterns among like TMS Squadrons**
- **Analysis of RFI/BCM performance of MALS**

RFT

Unclassified

What Should Be Observed & Timeframe



Deliverables

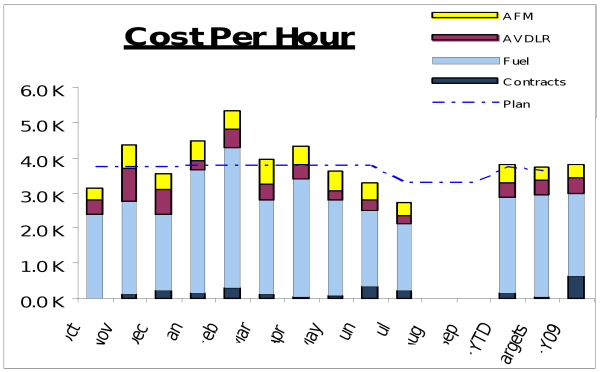
- Schedule that allows for increased rotation of aircraft inventory
- Analysis of Bad Actors and Repeat/Recur Systems

Expectations (60 days or less)

- Improving material condition for all aircraft on hand due to better scheduling (buffer management)
- Distribution of flight hours across all available aircraft
  - Relieves Pressure on "Fly/Fix" Conflict

** Long Term: Improving material condition for aircraft entering into planned depot maintenance periods (shorter cycle times)

What Should Be Observed & Timeframe



Deliverables

- **Analysis of material consumption patterns among like TMS Squadrons**
- **Analysis of Bad Actor & Repeat/Recur Systems**
- **Analysis of variation causing "re-fly's" (Fuel charges)**

Expectations (60 days or less)

- **More reliable material consumption patterns**
- **Improved analysis of troubleshooting at O Level/MALS**

**** Long Term: Opportunity for validation of T&R requirements**

❖Simulator Usage

❖Batch Production vs. more frequent ops

Making a Difference? Yes

- Recovered unfunded flight hours for training ($33M)
  - ✓ Efficiencies recovered more than 6,100 hours within the OP-20 budget.
  - ✓ At a nominal $5500/FH, this created more than $33M in training opportunities

More training time airborne

- AV-8B operating maintenance cost avoidance $6.2M+ during FY10; AVDLR earned value $21.8M / 19.9% higher th
  - ✓ Increased component repair rates and improved engine tim

More shadows on the ramp

- EA-6B avg FY-11 CPFH reduction of $504.00
  - ✓ At 7,594 flight hours flown through July, results in $3.8M savings

- MV-22 OP-20 FHP CPFH decreased from an FY 10 actual monthly avg $11, 648 to FYTD FY11 monthly avg of $9,123
  - ✓ At $2,525 CPFH monthly average savings – 21% reducti
  - ✓ With 26,400 flight hours flown through Jul = ~$66.7M sav

More money for parts, equipment, labor and fuel

- Developed Maintenance Personnel Readiness metric
  - ✓ Measures certifications and qualifications even to the detachment level, truly reflecting a unit's maintenance personnel overall readiness

Better trained, more qualified workforce to meet any mission

Points of Contact

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TMS Team Advisor

MAG CR Action Officer

MAG AIRSpeed Site Core Lead



Right Force, Right Readiness, Right Time

Fight & Train Now…

Posture For The Future….


Questions ?

www.public.navy.mil/airfor/nae/

New